

## 450.5 Acceptance and Testing of Pipe for Water

### 450.5.1.1 Testing Procedure

Testing Procedure:

#### Test One: High Chlorine

There are three methods of high chlorination testing: table, continuous feed and slug. Refer to AWWA C651 for further detail. Free chlorine residual shall not be less than 50 mg/L. An additional test may be required at the Inspector's request within 12 hours of the first test.

#### Test Two: Low Chlorine

After the applicable retention period, heavily chlorinated water should not remain in prolonged contact with pipe. In order to prevent damage to the pipe lining or corrosion damage to the pipe itself, the heavy chlorinated water shall be flushed from the main until chlorine measurements show that the concentration in the water leaving the main is less than 3.5 mg/L.

The environment into which the chlorinated water is to be discharged shall be inspected. If there is any possibility that the chlorinated discharge will cause damage to the environment then a neutralizing chemical shall be applied to the water to be wasted to neutralize thoroughly the chlorine residual remaining in the water.

#### Test Three: Bacteriological Tests

After final flushing and before the new water main is connected to the distribution system, bacteriological samples shall be collected from the new main. At least one set of samples shall be collected from every 1200 ft. of the new main, plus one set from the end of the line and at least one set from each branch. All samples shall be tested for bacteriological quality in accordance with the Colorado Department of Health Regulations.

If trench water has entered the new main during construction or, if in the opinion of the Inspector, excessive quantities of dirt or debris have entered the new main, bacteriological samples shall be taken at intervals of approximately 200 ft. and shall be identified by location.